



## SG-3227

2-channel IEPE Signal Conditioner

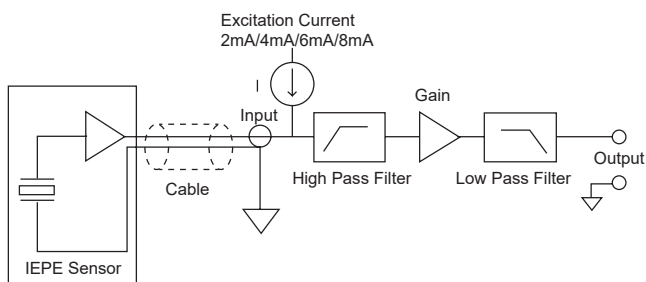
### Introduction

SG-3227 is a 2-channel IEPE signal conditioner. It has 2mA/4mA/6mA/10mA excitation current for sensors with integrated amplifiers. It features three selectable gain x1/x10/x100 ranges individually for two channels. LED failure indicators for sensor condition minimize the risk of handling errors.

### System Specifications

Model Name	SG-3227
<b>LED Indicator</b>	
System LED Indicator	1 as Power Indicator
LED Status Indicator	Yellow : Sensor Open Green : Sensor Normal Red : Sensor Short
<b>Isolation</b>	
Input/Output to Power	1000 VDC
<b>EMS Protection</b>	
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal
EFT (IEC 61000-4-4)	±4 kV for Power Line
Surge (IEC 61000-4-5)	±1 kV for Power Line
<b>Power</b>	
Reverse Polarity Protection	Yes
Input Range	+10 to +30 VDC
Consumption	3 W
<b>Mechanical</b>	
Dimensions (W x L x H)	25 mm x 116 mm x 120 mm
Installation	DIN-Rail or Wall Mounting
<b>Environment</b>	
Operating Temperature	-25 to +75°C
Storage Temperature	-40 to +85°C
Humidity	10 to 95% RH, Non-condensing

### Function Diagrams



### Features

- 2-channel Input
- Individual Channel Configuration
- Excitation Current Support: 2 mA / 4mA / 6mA / 10mA
- Signal Amplification of x1 , x10 and x100
- LED Indicators for Sensor Open, Short and Normal
- Flexible DIN-Rail Mounting



### Applications

- Data Acquisition System
- Vibration Measurement
- Remote Diagnosis
- Testing Equipment

### I/O Specifications

Model Name	SG-3227
<b>IEPE</b>	
Channel	2
Connectors	Screw Terminal (Including a female BNC to terminal block adaptor)
Excitation Current	2 mA / 4mA / 6mA / 10mA
Gain	x1 / x10 / x100 for AC Coupling
Upper Cut-off Frequency	x1, x10 Gain : 80 kHz ; x100 Gain : 50 kHz
Lower Cut-off Frequency	AC Coupling (0.1uF) : 1.6 Hz AC Coupling (1uF) : 0.2 Hz

### LED Indicators and Switch setting

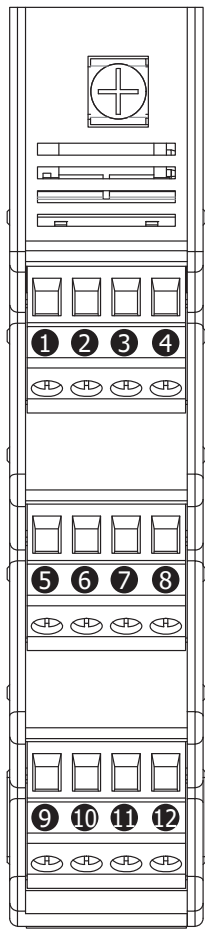
LED Indicators	Description
<b>RED</b>	Sensor Short
<b>GREEN</b>	Normal Operation
<b>YELLOW</b>	Sensor Open

Coupling Setting	1	2
DC	OFF	OFF
AC (0.1 uF)	ON	OFF
AC (1 uF)	OFF	ON

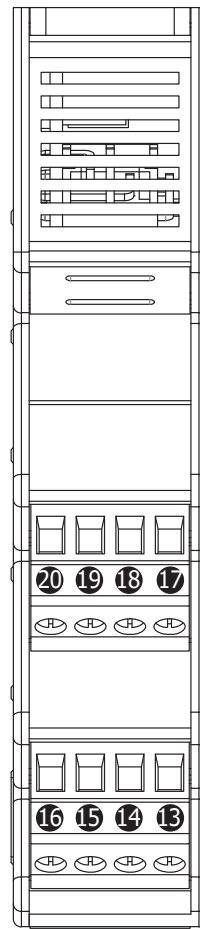
Gain Setting	3	4
x1	OFF	OFF
x10	ON	OFF
x100	OFF	ON

Excitation Current Setting	5	6
2 mA	OFF	OFF
4 mA	ON	OFF
6 mA	OFF	ON
10 mA	ON	ON

## Terminal Wiring Diagram



TOP			
1	2	3	4
+VDD		-VSS	
5	6	7	8
Out0+		Out0-	
9	10	11	12
IEPE0+		IEPE0-	

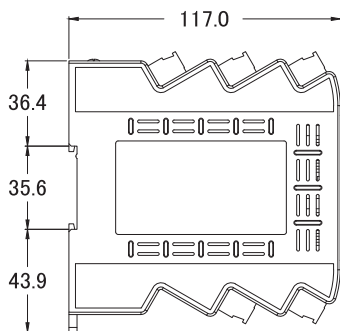


Bottom			
13	14	15	13
IEPE1+		IEPE1-	
17	18	19	20
Out1+		Out1-	

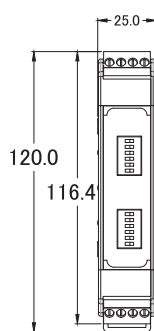
Top View

Bottom View

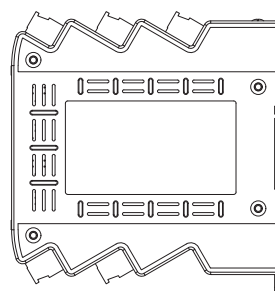
## Dimensions (Units: mm)



Left View



Front View



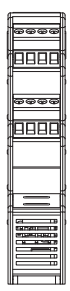
Right View



Rear View



Top View



Bottom View

## Ordering Information

**SG-3227 CR**

2-channel IEPE Signal Condition (RoHS)